

Standards of Public Land Health

Evaluation of 62069 CONEJO BASIN Allotment

[03/12/2008]

The Roswell Field Office conducted Rangeland Health Assessments at 1 study site within allotment #62069, Conejo Basin. These assessments evaluated Soil/Site Stability, Hydrologic Function and Biotic Integrity indicators within the vicinity of each study site. Existing monitoring data and Ecological Site Descriptions were incorporated into and in support of this field assessment. A summary of each assessment is attached and shown in the following table.

Study Area or Assessment Area	UPLAND			BIOTIC			RIPARIAN		
	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet	Meets	Monitor an Indicator	Does Not Meet
62069-IDSU-A073	X			X			N/A		

Twenty-two (22) indicators for Rangeland Health were evaluated for public land on Conejo Basin, allotment #62069. Ten of these assessed soil site stability, 11 hydrologic function and 13 biotic integrity. These qualitative assessments in conjunction with ecological site descriptions and quantitative information gathered from previous data collected on 1 trend plot location within this allotment were utilized to make rangeland health determinations. This allotment is a "C" custodial category due to small amounts of public land present.

This allotment is currently authorized for 28 cattle @ 100% public land use yearlong for 336 AUM's (Animal Unit Months). Previous data collected for this allotment was 1991 when an inventory transect was read. This present visit was to verify whether mesquite (*Prosopis glandulosa*) treatment by aerial application would be feasible or not on this allotment. A determination was made that hand application to reduce mesquite would be more logistically viable and economical.

Ecological site is CP-2 Loamy on 1,196 acres/484 hectares with a Holloman-Reeves soil complex in De Baca county. Elevation varies between 4,000 ft/1,212 m and 4,800 ft/1,454 m on 1-15% slopes on uplands. Holloman soil is very shallow and shallow and well-drained, formed in residuum derived from gypsiferous material. Reeves soil is moderately deep to gypsiferous material and is well-drained, formed in loamy alluvium derived dominantly from gypsum. Tucumcari and San Jon soil also are intermingled on concave and shale/sandstone benches respectively.

This site is located along an old two-track. Some cattle were observed in arroyos along main ranch road and have trailed between the two waters which are approximately 1/2 mile in different directions from this site. Majority of indicators assessed fell well within normal range of variability with None to Slight and Slight to Moderate ratings. Bare ground is slightly higher with an estimate of 50%. Annual production is 1/2 of potential with mesquite scattered

throughout. Pronghorn (*Antilocapra americana*) were observed throughout this ranch and traversing upland benches. Wildlife habitat is fair for deer and excellent for pronghorn. Upland bird habitat is also in good condition with cover and food available. Porcupine (*Erethizon dorsatum*) use on mesquite bark is evident here.

It is the professional opinion of the Assessment Team, public land within allotment #62069 Conejo Basin meets Upland and Biotic Standards. There are no Riparian issues present therefore this standard was not addressed. See site notes, comments and recommendations for further information regarding this assessment.

Recommendations: Recommend hand application of herbicide to treat mesquite which is scattered throughout. This in conjunction with an EQIP contract, due to huge amounts of private land, should aid in restoring those areas back to a grassland state which have been encroached and invaded with undesirable brush species. Current livestock waterings are adequate with infrastructure placed at properly spaced intervals. Fencing and other improvements should continue to be repaired and maintained to ensure that they are properly functioning.

RFOs Upland and Biotic Standard Assessment Summary Worksheet			
SITE 62069-IDSU-A073			
Legal Land Desc	SWNW 13 0030S 0230E Meridian 23	Acreage	1196
Ecosite	070BY052NM LOAMY CP-2	Photo Taken	Y
Watershed	13060003140 RAMON		
Observers	NAVARRO/ARNOLD	Observation Date	03/12/2008
County Soil Survey	NM011 DE BACA	Soil Var/Taxad	
Soil Map Unit	026	Soil Taxon Name	HOLLOMAN
Texture Class	NM011 L	Soil Phase	HOLLOMAN-REEVES
Texture Modifier	NM011 SILT LOAM		
Observed Avg Annual Precipitation		Observed Avg Growing Season Precipitation	
NOAA Annual Precipitation	9.89	NOAA Growing Season Precipitation	8.38
NOAA Avg Annual Precipitation	9.7	NOAA Avg Growing Season Precipitation	8.21
Disturbances and Animal Use:	Livestock observed along arroyo bottoms next to main ranch road. Old two-tracks traverse through this site but have re-vegetated over time. Some cattle trailing evident throughout.		

Part 2. Attributes and Indicators						
		Departure from Ecological Site Description/Ecological Reference Areas				
Attribute	Indicators	Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S H	Rills					X
Comments:						
S H	Water Flow Patterns				X	
Comments:						
S H	Pedestals and/or Terracettes				X	
Comments:						
S H	Bare Ground			X		
Comments:	current estimate is 50%					
S H	Gullies				X	
Comments:	mostly associated with roads and cow trails					
S	Wind-scoured, Blowouts, and/or Deposition Areas					X
Comments:						
H	Litter Movement					X
Comments:						
S H B	Soil Surface Resistance to Erosion					X
Comments:						
S H B	Soil Surface Loss or Degradation				X	
Comments:						
H	Plant Community Composition and Distribution Relative to Infiltration and Runoff				X	
Comments:						
S H B	Compaction Layer				X	
Comments:						
B	Functional/Structural Groups				X	
Comments:						
B	Plant Mortality/Decadence					X
Comments:						

H B	Litter Amount				X	
Comments:	20% is the current estimate					
B	Annual Production			X		
Comments:	500 lbs/ac or kg/ha is the current estimate					
B	Invasive Plants			X		
Comments:	mesquite scattered throughout					
B	Reproductive Capability of Perennial Plants					X
Comments:						
S	Physical/Chemical/Biological Crusts				X	
Comments:	physical crust					
B	Wildlife Habitat				X	
Comments:	fair for deer and excellent for pronghorn					
B	Wildlife Populations				X	
Comments:						
B	Special Status Species Habitat					X
Comments:	n/a					
B	Special Status Species Populations					X
Comments:	n/a					

Part 3. Summary

A. Indicator Summary - Each of the indicators are associated with one or more of the attributes below. An indicator is placed in a category (columns) above and summed for each of the Standard Attributes.

Standard Attribute		Extreme	Moderate to Extreme	Moderate	Slight to Moderate	None to Slight
S	Soil	0	0	1	6	3
H	Hydrologic	0	0	1	7	3
B	Biotic	0	0	2	6	5

B. Attribute Summary. In this table, the Extreme and Extreme to Moderate columns in the table above are merged for the *Does not Meet* column, Moderate becomes *May Need More Info*, and Slight to Moderate and None to Slight merge to form the *Meets* columns. Values from the table are summarized below. Space is provided for rationale of the determination. This space should most certainly be used when the determination by the ID team conflicts with the summarized values. Provide the sources of information that lead to the determination. X out the appropriate

box for each attribute to denote final agreed upon determination by the ID team.				
Attribute	Rationale	Does Not Meet	May Need More Info	Meets
Soil		0	1	9
Hydrologic		0	1	10
Biotic		0	2	11
<p>Site Notes: Pronghorn observed at the south end of this pasture. Some livestock observed along the arroyos next to the main ranch road with some trailing. Mesquite is not an issue here; porcupine use is evident on the mesquite bark in the drainage adjacent to this site.</p> <p>This site was gps'd and post set, approximately 1/2 mile from water. Photo points established at 50 and 210 degrees respectively.</p>				

Determination of Public Land (Rangeland) Health for 62069 CONEJO BASIN

The Record of Decision (ROD) for the New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management (dated January 2001) adopted three Standards for Public Land Health. These are (1) Upland Sites Standard, (2) Biotic Communities, Including Native, Threatened, Endangered, and Special Status Species Standard and (3) Riparian Sites Standard.

The ROD also established a process for the BLM Field Offices for implementation. Through a public participation process, the Roswell Field Office developed and adopted indicators to use in conjunction with existing monitoring data to assess these standards.

Field assessment worksheets and other available data that evaluate the local indicators were completed for this allotment. Based on these assessments, it is my determination that public land within Conejo Basin allotment #62069, meets the (1) Upland Sites standard and (2) Biotic Communities, including Native, Threatened, Endangered, and Special Status Species standard. There are no public land Riparian areas on this allotment, therefore this standard was not addressed.

/s/ BRAD PENDLEY
Assistant Field Manager

08/08/2008
Date